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| APPLICATION NO. FILING DATE |        | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------------------|--------|-------------|----------------------|-------------------------|------------------|
| 09/889,086                  | •      | 07/11/2001  | Yukio Ichikawa       | 33791                   | 6838             |
| 116                         | 7590   | 08/07/2006  |                      | EXAMINER                |                  |
| PEARNE                      |        |             | BHATTACHARYA, SAM    |                         |                  |
| 1801 EAST<br>SUITE 120      |        | (EE1        | ART UNIT             | PAPER NUMBER            |                  |
| CLEVELA                     | ND, OH | 44114-3108  | 2617                 |                         |                  |
|                             |        |             |                      | DATE MAILED: 08/07/2000 | 6                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | Application    | pplication No. Applicant(s)  |                   |        |  |  |  |  |
|---|---|----------------|--|-------------------|--------|--|--|--|--|
|   |   | 09/889,086     |  | ICHIKAWA ET AL.   |        |  |  |  |  |
|   | Office Action Summary   | Examiner       |  | Art Unit          |        |  |  |  |  |
|   |   | Sam Bhatta     | charya   | 2617              |        |  |  |  |  |
| Period fo   | The MAILING DATE of this communication app<br>r Reply   | pears on the   | cover sheet with the c   | orrespondence add | dress  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                |  |                   |        |  |  |  |  |
| Status  |   |                |  |                   |        |  |  |  |  |
| 1)⊠   | Responsive to communication(s) filed on 21 J  | une 2006.      |  |                   |        |  |  |  |  |
| ′=  | ·   | s action is no | n-final.   |                   |        |  |  |  |  |
| /   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |                |  |                   |        |  |  |  |  |
| ٠,١   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |                |  |                   |        |  |  |  |  |
| Dispositi   | on of Claims  |                |  |                   |        |  |  |  |  |
| 4)⊠ Claim(s) <u>1-4 and 6-10</u> is/are pending in the application.   |   |                |  |                   |        |  |  |  |  |
| -   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                |  |                   |        |  |  |  |  |
| 5)🖂   |   |                |  |                   |        |  |  |  |  |
| 6)⊠   | ☑ Claim(s) <u>1-4 and 7-10</u> is/are rejected.   |                |  |                   |        |  |  |  |  |
| 7)  | Claim(s) is/are objected to.  |                |  |                   |        |  |  |  |  |
| 8) 🗌  | 8) Claim(s) are subject to restriction and/or election requirement.   |                |  |                   |        |  |  |  |  |
| Applicati   | on Papers   |                |  |                   |        |  |  |  |  |
| 9)  | The specification is objected to by the Examine   | er.            |  |                   |        |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |   |                |  |                   |        |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |                |  |                   |        |  |  |  |  |
|   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |                |  |                   |        |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |                |  |                   |        |  |  |  |  |
| Priority (  | ınder 35 U.S.C. § 119   |                |  |                   |        |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |   |                |  |                   |        |  |  |  |  |
| 2) Notice 3) Infor  | ot(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) ce mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 cr No(s)/Mail Date | 3)             | 4) Interview Summary Paper No(s)/Mail D: 5) Notice of Informal F 6) Other: | ate               | D-152) |  |  |  |  |

#### **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

## Claim Rejections - 35 USC § 103

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1-4 and 7-10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (JP Patent 11-312285, Machine Translation) in view of Tognazzini (U.S. Patent 5,914,675), and further in view of Shachar et al. (US 5,764,736).

As to claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including first radio communication means 23 for transmitting predetermined data having state information in the detection of an abnormal state, the predetermined location information and a terminal ID to an information service center on occurrence of a predetermined event,

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit, a mobile terminal 36 detachable from said on vehicle terminal main unit, wherein said mobile terminal 36 includes voice communication means 36. See paragraphs [0005], [0013] to [0015], [0022] and [0025] and Figures 1-3.

Yoshida does not disclose means for detecting a relative distance between said on-vehicle terminal main unit and said mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system. The Tognazzini reference teaches means for detecting a relative distance between an on-vehicle terminal main unit and a mobile

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terminal, wherein said means switches a main system for communications of said on-vehicle communication system. See FIGS. 1 and 2B, and col. 4, lines 20-25, col. 7, lines 28-32, col. 8, lines 59-63 and col. 9, lines 7-11.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida to have means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system, as taught by Tognazzini, in order to help rescuers in locating the area/region of a crash/emergency and in communicating with users of the on-vehicle communication system in an emergency.

The combination of Yoshida and Tognazzini fails to teach that the on-vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means, that if the mobile terminal has finished having the first radio communication means transmit the predetermined data to the information service center, the mobile terminal has the second radio communication means transmit data for voice communication to the information service center via the on-vehicle terminal main unit and the radio communication means in the on-vehicle terminal main unit communicates with the information service provider.

However, in an analogous art, Shachar discloses a communication system in which an on-vehicle terminal main unit and a mobile terminal can communicate with each other via second radio communication means 160, if the mobile terminal has finished having the first radio communication means transmit the predetermined data to the information service center, the mobile terminal has the second radio communication means transmit data for voice

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communication to the information service center via the on-vehicle terminal main unit and the radio communication means in the on-vehicle terminal main unit communicates with the information service provider 128. See FIG. 1, the Abstract, col. 7, lines 38-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yoshida and Tognazzini by incorporating these features taught in Shachar for the purpose of providing a way for the vehicle to communicate the abnormal state directly to the information service provider even in the absence of a mobile user.

As to claim 2, the Tognazzini reference discloses "the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida-Tognazzini-Shachar wherein the system further comprises location information detecting means as a function of said mobile terminal, as further taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 3, the Tognazzini reference discloses "the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33). "The emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device" (Col. 3, lines 65-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida-Tognazzini-Shachar wherein the

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mobile terminal further includes a function of the state sensor means, as further taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 4, the Tognazzini reference discloses "the emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device" (Col. 3, lines 65-67). "The GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida-Tognazzini-Shachar wherein the mobile further includes functions of the location information detecting means and the state sensor means, as further taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 7, as cited in claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including location information detecting means 22; state sensor means 21 for detecting an abnormal state and outputting state information; means 24 for recording location information having time information and latitude/longitude information of the location information obtained by the location information detecting means 22 at each point; first radio communication means 23 for transmitting predetermined data having the state information, the predetermined location information and a terminal ID to an information service center 2 on occurrence of a predetermined event, and voice communication means 36,

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wherein said on-vehicle communication system comprises an on-vehicle terminal main unit and a mobile terminal 36 detachable from said on-vehicle terminal main unit, and wherein said mobile terminal 36 includes voice communication means 36, and wherein said on-vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35.

However, it does not disclose the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling. The Tognazzini reference (Figure 1) discloses "the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory" (Col. 4, lines 54-57). "If the received data is GPS data, the control processor 24a accesses the previously-stored GPS data from the memory 38a in step 104, and compares the received GPS data with the stored GPS data in step 106. If the variations between GPS data indicate that the device 10 has moved at least a predetermined distance, for example, a distance L=100 meters, the control processor 24a updates the memory 38a in step 108" (Col. 7, lines 24-32).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling, as taught by Tognazzini, so that if the mobile terminal becomes separated from the vehicle during a crash, the control processor in the

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mobile terminal can still provide location and vehicle status information to rescue teams by accessing the memory.

The combination of Yoshida and Tognazzini fails to teach that the radio communication means in the on-vehicle terminal main unit communicates with the information service provider. However, in an analogous art, Shachar discloses a vehicle communication system in which a radio communication means in the on-vehicle terminal main unit communicates with the information service provider 128. See FIG. 1, the Abstract, col. 7, lines 38-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yoshida and Tognazzini by incorporating the feature taught in Shachar for the purpose of providing a way for the vehicle to communicate the abnormal state directly to the information service provider even in the absence of a mobile user.

As to claim 8, Yoshida-Tognazzini-Shachar discloses the on-vehicle communication system according to claim 7. The Tognazzini reference further discloses the data retaining means stores higher priority emergency information data to be transmitted to the information service center, and the emergency information data stored in the data retaining means can be taken out of the vehicle together with said mobile terminal in the event of an emergency ("the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory" (Col. 4, lines 54-57). "Finally, the telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue station" (Col. 5, lines 20-23). "If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the

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control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a" (Col. 5, lines 56-60)).

As to claim 9, Yoshida-Tognazzini-Shachar discloses the on-vehicle communication system according to claim 8. The Yoshida reference further discloses the on-vehicle communication system makes voice communication with the information service center after transmitting the emergency information data to the information service center from the mobile terminal ("when an emergency occurs in a vehicle due to accident, etc., the detailed content of the accident is notified to an emergency aid center by first executing the position information of own vehicle, accident information, and furthermore, such emergency information as vehicle ID and crew ID information, etc., stored in advance are notified through radio data communication by a first radio transmission means 33, and automatically switching the data communication to voice communication by a second radio transmission means 35, when the data communication is completed" (Abstract). "The 2nd radio-transmission means 35 is connected to a handset (or hand free set) 36" (paragraph [0015], line 6)).

As to claim 10, Yoshida-Tognazzini-Shachar discloses the on-vehicle communication system according to claim 9. The Tognazzini reference further discloses communications from the mobile terminal to the service center are made via a communication apparatus different from said on-vehicle communication system associated with said mobile terminal, the communication apparatus existing in the close proximity of said mobile terminal ("the portable device 10 may also be used as a conventional wireless telephone during normal operations" (Col. 8, lines 48-50). "The telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue

station" (Col. 5, lines 20-23). "Upon the detection of an emergency trigger, the emergency locator device automatically places a wireless telephone call to a predetermined emergency number and supplies the stored location data and vehicle condition data" (Col. 10, lines 47-51). "If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a" (Col. 5, lines 56-60)).

## Allowable Subject Matter

- Claim 6 is allowed. 4.
- The following is a statement of reasons for the indication of allowable subject matter: 5. claim 6 is allowed for the reasons stated in the previous Office action.

### Response to Arguments

Applicant's arguments with respect to claims 1-4 and 7-10 have been considered but are 6. moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-6, with first Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sb

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